Report of Working Group on Hydrology (WGH)

Tetsuya IKEDA, PhD
Chair of WGH/ Deputy Director, ICHARM

ESCAP/WMO Typhoon Committee 15th Integrated Workshop

December 2, 2020









WGH 9th Meeting (October 22, 2020) and Parallel Session at the 15th IWS (December 1, 2020)

Participations:

Cambodia; China; Japan; Hong Kong - China; Laos; Malaysia; the Philippines; Republic of Korea; Singapore; Thailand; USA; Viet Nam and TCS

Contents:

- 1. Review of the WGH 9th Meeting
- 2. Implementation status of WGH AOPs 2020
- 3. Implementation plan of WGH AOPs 2021 (+ budget request for 2021)
- 4. Points of Discussion
- 5. Recommendations to TC



1. Review of the WGH 9th Meeting

Date & Venue: October 22, 2020 @ WEB meeting

Organizers: Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan with logistic support by Infrastructure Development Institute (IDI)

- Originally scheduled in combination with the 4th Asia Pacific Water Summit
 in Kumamoto, but due to COVID-19, it was decided to host a video
 conference (VC) instead of face-to-face meeting.
- 37 participants in total from 10 Members, (China, Japan, Hong Kong China, Laos, Malaysia, Philippines, the Republic of Korea, Singapore, Thailand and Vietnam) and TCS.
- Chaired by Dr. Tetsuya Ikeda (Japan) with its vice chairs of Dr. Hyo-Seob
 Cho (ROK) and Dr. Hou Aizhong (China), the WGH was composed of the
 presentations of the Member reports and the progress of the AOPs.

2. Implementation status of WGH AOPs 2020

The list of WGH AOPs in 2020 and beyond

Item	Projects	Driver	Duration		
AOP1	Knowledge Sharing on Storm Surge Inundation Mapping	USA	2020-2022		
AOP2	Application of Hydrological Data Quality Control System in TC Members	Korea	2018-2022		
AOP3	Enhancement of Flood Forecasting Reliability with Radar Rainfall Data and Stochastic Technique	Korea	2018-2022		
AOP4	OSUFFIM Phase-II: Extension of OSUFFIM Application in TC Members	China	2018~2022		
AOP5	Impact Assessment of Climate Change on Water Resource Variability in TC Members	China	2018-2020		
AOP6	Flood Risk Watch Project for Life-saving	Japan	2019-2022		
AOP7	Platform on Water Resilience and Disaster under IFI	Japan	2019-2022		

The summary of TCTF Budget Request for 2020 Activities (USD)

Item	Projects	Driver	Budget
1	Support the activities related to Application of Hydrological Data Quality Control System in TC Members	Korea	4,000
2	Support the activities related to Enhancement of Flood Forecasting Reliability with Radar Rainfall Data and Stochastic Technique	Korea	2,000
3	Support the activities related to OSUFFIM Phase-II: Extension of OSUFFIM Application in TC Members	China	8,000
4	Support the activities related to Impact Assessment of Climate Change on Water Resource Variability in TC Members	China	4,000
5	Support the activities related to Platform on Water Resilience and Disaster under IFI and hosting WGH 9th Working Meeting in Japan	Japan	7,000
	Total		25,000

3. Implementation plan of WGH AOPs 2021

The list of WGH AOPs in 2021 and beyond (~2022)

Item	Projects	Driver	Duration
AOP1	Knowledge Sharing on Storm Surge Inundation Mapping	USA	2020-2022
AOP2	Application of Hydrological Data Quality Control System in TC Members	Korea	2018-2022
AOP3	Enhancement of Flood Forecasting Reliability with Radar Rainfall Data and Stochastic Technique	Korea	2018-2022
AOP4	OSUFFIM Phase-II: Extension of OSUFFIM Application in TC Members	China	2018~2022
AOP5	Impact Assessment of Climate Change on Water Resource Variability in TC Members	China	2018-2022
AOP6	Flood Risk Watch Project for Life-saving	Japan	2019-2022
AOP7	Platform on Water Resilience and Disaster under IFI	Japan	2019-2022

The summary of TCTF Budget Request for 2021 Activities (USD)

Item	Projects	Driver	Budget
1	AOP1:Knowledge Sharing on Storm Surge Inundation Mapping	USA	4,000
2	AOP2: Application of Hydrological Data Quality Control System in TC Members	Korea	4,000
3	AOP3: Enhancement of Flood Forecasting Reliability with Radar Rainfall Data and Stochastic Technique	Korea	3,000
4	AOP4: OSUFFIM Phase-II: Extension of OSUFFIM Application in TC Members	China	8,000
5	AOP5: Impact Assessment of Climate Change on Water Resource Variability in TC Members	China	4,000
6	AOP6: Flood Risk Watch Project for Life-saving	Japan	0
7	AOP7: Platform on Water Resilience and Disaster under IFI	Japan	7,000
	Total		30,000

4. Points of discussion

Discussion on the Strategic Plan:

- Two Targets and Five KRAs generally reflects the vision and mission of TC, and fully summarizes all aspects of tasks which TC should take care.
- > It might not need to make changes.
- > The followings may be considered under the part of Priorities for WGs in future:
 - How to conduct WG's activities online under public emergencies, including secure data monitoring, transmission, and warning information dissemination.
 - Application of big-data and AI technology in typhoon-induced water-related disaster risk reduction, including forecasting and early warning;
 - How to optimize dam operation, and issue inundation mapping

Discussion on the Chairmanship of WGH

- Based on the full discussion and communication, the participants got the following consensus on the Chairmanship of WGH
 - Current structure of WGs' chairmanship is running very well, and it has the most benefit for TC on mobilization of resources, cooperation and support.
 - WGH will maintain the current chair/vice-chair system.
 - Participants agreed to maintain setting one Chairperson and three Vice-chairpersons for WGH.
- It is well noted that Japan volunteers to host WGH 10th meeting in 20218

5. Recommendation to TC

- To appoint Dr. Mamoru Miyamoto (Japan) as Chairperson, and to re-appoint Dr. CHO Hyo Seob (ROK), Dr. HOU Aizhong (China) and Mr. Kenneth Kleeschulte (USA) as Vice-chairpersons in next two years
- To request US\$30,000 from TCTF in total for supporting overall WGH activities for 2021 calendar year.
- To request China to extend the project of Impact Assessment of Climate Change on Water Resource Variability in TC Members to the end of 2022.
- To thank Japan for hosting the video conference for WGH 9th Meeting.
- To request Japan to host WGH 10th Meeting in 2021.
- To request HRFCO to continue maintaining and operating the WGH webpage for effective sharing information among WGH members with support from KICT and TCS.
- To appoint the focal point of WGH, Dr. Hyeongyo JEONG (ROK) as the liaison to PTC and WMO RA II for enhancing hydrological cooperation between TC and other regional bodies.
- To continue focusing on improving the ability to forecast hydrological phenomena and provide measures for the effectiveness of the improvements.

Thank you very much for your attention!

